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APPLICATION NO).	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/073,305	_	02/13/2002	Karen Papierniak	9686 (3225-133)	4450	
26890	7590	11/02/2004	•	EXAMINER		
JAMES M. STOVER				NGUYEN BA, HOANG VU A		
NCR CORPORATION 1700 SOUTH PATTERSON BLVD, WHQ4				ART UNIT	PAPER NUMBER	
DAYTON			•	2122		
				DATE MAILED: 11/02/2004	4	

Please find below and/or attached an Office communication concerning this application or proceeding.



	Application No.	Application No. Applicant(s) 10/073,305 PAPIERNIAK ET AL.	
	10/073,305		
Office Action Summary	Examiner	Art Unit	
	Hoang-Vu A Nguyen-Ba	2122	
The MAILING DATE of this communication Period for Reply	on appears on the cover sheet with	the correspondence addr	ess
A SHORTENED STATUTORY PERIOD FOR F THE MAILING DATE OF THIS COMMUNICAT - Extensions of time may be available under the provisions of 37 of after SIX (6) MONTHS from the mailing date of this communicat - If the period for reply specified above is less than thirty (30) days - If NO period for reply is specified above, the maximum statutory - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	TON. CFR 1.136(a). In no event, however, may a reply ion. s, a reply within the statutory minimum of thirty (3 period will apply and will expire SIX (6) MONTH's y statute, cause the application to become ABAN	be timely filed 0) days will be considered timely. S from the mailing date of this com DONED (35 U.S.C. § 133).	munication.
Status			
 Responsive to communication(s) filed on This action is FINAL. Since this application is in condition for a closed in accordance with the practice ur 	This action is non-final. Ilowance except for formal matters		nerits is
Disposition of Claims			,
4) □ Claim(s) 1-21 is/are pending in the application 4a) Of the above claim(s) is/are with 5) □ Claim(s) is/are allowed. 6) □ Claim(s) 1-21 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction is	thdrawn from consideration.		
Application Papers			
9) ☐ The specification is objected to by the Example 10) ☐ The drawing(s) filed on 13 February 2002 Applicant may not request that any objection of Replacement drawing sheet(s) including the country of the oath or declaration is objected to by the specific sheet of the specific sheet	to the drawing(s) be held in abeyance. correction is required if the drawing(s)	See 37 CFR 1.85(a). is objected to. See 37 CFR	1.121(d).
Priority under 35 U.S.C. § 119		·	
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the	iments have been received. Iments have been received in App	lication No	age

* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____. 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. 6) Other: ____. U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office Action Summary Part of Paper No./Mail Date 20041026

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DETAILED ACTION

- 1. This action is responsive to the application filed February 13, 2002.
- 2. Claims 1-21 have been examined.

Priority

3. The priority date considered for this application is February 13, 2002.

Oath/Declaration

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.63 identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

- a. it does not identify the citizenship of inventor Giai DO of San Diego, CA;
- b. it does not state that the acknowledgment of the duty to disclose information which is material to the examination of this application is in accordance with 37 CFR 1.56 instead of 37 CFR 1.56(a).

Drawings

5. This application has been filed with informal drawings (see Figures 4 and 5) which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Specification

6. The title of the invention is not descriptive. A new tittle is required that

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is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Method and System for automating graph generation from data sets."

7. The specification is objected to because of the following minor informality:

The use of trademarks, such as Visual Insights AdvisorTM, SPSS nVIZn SDK, etc. has been noted in this application. Trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

To expedite correction on this matter, the examiner suggests the following guidelines for Applicant to follow in amending the specification:

- i. Capitalize each letter of a trademark or accompany the trademark with an appropriate designation symbol, e.g., TM or ®, as appropriate.
- ii. Use each trademark as an adjective modifying a descriptive noun. For example, it would be appropriate to recite "the JAVA platform" or "the JAVA programming language." Note that in these examples, "platform" and "programming language" provide accompanying generic terminology, describing the context in which the trademark is used. By itself, the trademark JAVA specifies only the source of the so-labeled products, namely SUN Microsystems, Inc.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to

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enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 6 and 21 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In particular, claims 6 and 21 recite the limitation "transmitting the graph in connection with email." This limitation was nowhere described in the specification.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. Claims 13-21 are rejected under 35 U.S.C § 101 because the claimed invention is directed to non-statutory subject matter.

Pursuant to these claims, the term "system" is interpreted in light of the specification which describes that the system includes a database storing a data set, at least one rule, and at least one graph type and a graph generator (see section [010]). The same system is claimed in claim 13. The system's components recited in the claim, such as the database and the graph generator are merely software components, i.e., computer programs per se. Such claimed matter, which is descriptive material *per se*, non-functional descriptive material is not statutory because it is not a physical "thing" nor a statutory process as there are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships

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between the computer program and other claimed aspects of the invention which permit the computer's program's functionality to be realized. Since a computer program is merely a set of instructions capable of being executed by a computer, the program itself is not a process, without the computer-readable medium needed to realize the computer's functionality. In contrast, a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program's functionality to be realized, and is thus mandatory. *Warmerdam*, 33 F.d at 1361, 31 USPQ 2d at 1760. *In re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978). See MPEP § 2106 (IV)(B)(1)(a).

On this basis, claim 13 is rejected under 35 U.S.C. § 101.

Claims 14-21, which depend from claim 13, are also rejected under 35 U.S.C. § 101 for the same reasons.

Claim Rejections - 35 U.S.C. § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United

States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

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13. Claims 1-4 and 7-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,477,538 to Yaginuma et al. ("Yaginuma").

Claim 1

Yaginuma discloses at least:

selecting a data set (see at least Figures 1, 30, 31, 32, 33 and related discussion in the specification);

applying a rule to the data set (see at least Figures 1, 30, 31, 32, 33 and related discussion in the specification); and

generating at least one graph based on the data set and rule applied (see at least Figures 1, 30, 31, 32, 33 and related discussion in the specification).

Claim 13

Yaginuma discloses at least:

a database storing a data set, at least one rule, and at least one graph type (see at least Figures 1, 18, 19 and related discussion in the specification); and

a graph generator selectively applying at least one rule and graph type to the data set to generate at least one graph (see at least Figures 1, 30, 31, 32, 33 and related discussion in the specification).

Claims 2 and 20

Rejections of base claims 1 and 13, respectively are incorporated. Yaginuma further discloses selectively publishing at least one of the graphs generated (see at least 16:35-45).

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Claims 7 and 21

Rejections of [base claim 1 and intervening claim 2] and 13, respectively are incorporated. Yaginuma further discloses wherein the publishing step includes publishing a graph by storing the graph to a storage device (see at least Figures 1, 18, 19 and related discussion in the specification).

Claims 3 and 18

Rejections of base claims 1 and 13, respectively are incorporated. Yaginuma further discloses the step of customizing a rule (see at least 15:13-38; Figures 14, 34-36 and related discussion in the specification).

Claims 4 and 19

Rejections of base claims 1 and 13, respectively are incorporated. Yaginuma further discloses the step of customizing a graph type (see at least Figures 14, 28-30, 34-36 and related discussion in the specification).

Claims 12 and 15

Rejections of [base claim 1 and intervening claim 4] and 13, respectively are incorporated. Claims 12 and 15 further disclose wherein the graph type includes at least one of a group of graph types consisting of a pie chart, a bar chart, a tree graph, a spreadsheet chart, a scatter plot, and a 3-D graph. Since claims 12 and 15 recite limitations in a form of alternative expression and explicitly claim at least one of the recited limitations, the Office considers only the limitation tree graph for art rejection purposes. The tree graph type is considered taught by Yaginuma (see at least Figure 39 and related discussion in the specification).

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Claim 8

Rejection of base claim 1 is incorporated. Yaginuma further discloses wherein the generating step occurs as a result of a trigger event (see at least Figure 30 and related discussion in the specification).

Claim 9

Rejection of base claim 1 is incorporated. Yaginuma further discloses wherein the generating step occurs as a result of a threshold being met or exceeded (see at least 18:39-56).

Claims 10 and 14

Rejections of base claims 1 and 13, respectively are incorporated. further discloses wherein the data set includes at least one of data, metadata, OLAP cubes, dimensional tables, lookup tables, and summary tables. Since claims 10 and 14 recite limitations in a form of alternative expression and explicitly claim at least one of the recited limitations, the Office considers only the limitation summary tables for art rejection purposes. The limitation summary table is considered taught by Yaginuma (see at least Figure 39 and related discussion in the specification).

Claim 11

Rejection of base claim 1 is incorporated. further discloses wherein the rule includes at least one of number of dimensions, data sparsity, and a value of data as rule criteria. Since claim 11 recites limitations in a form of alternative expression and explicitly claims at least one of the recited limitations, the Office considers only the limitation data sparsity for art rejection purposes. The limitation data sparsity is considered taught by Yaginuma (see at least Figure 39, e.g., "dispersion value" and related discussion in the specification).

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Claim 16

Rejection of base claim 13 is incorporated. Yaginuma further discloses wherein the database further stores at least one trigger (see at least Figure 4, steps S11, S12 and related discussion in the specification).

Claim 17

Rejection of base claim 13 is incorporated. Yaginuma further discloses wherein the database further stores at least one threshold value and wherein the graph generator selectively applies at least one rule and graph type to the data set to generate at least one graph as a result of a threshold value being met or exceeded (see at least Figure 39 and related discussion in the specification).

Claim Rejections - 35 USC § 103

- 14. The following is a quotation of the 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 15. Claims 5, 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over
- U.S. Patent No. 6,477,538 to Yaginuma et al. ("Yaginuma"), as applied to the base and intervening claims.

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Claims 5 and 21

Yaginuma does not specifically disclose wherein the publishing step includes publishing a graph to a web site. However, official notice is taken that publishing a graph or an image to a web site is well known in the art (see Lemay's Teach yourself Web Publishing with HTML 3.0 in a week, Chapter 9, 2nd Edition, 1996, SAMS.net). The basic requirement is that the graph filename is to be saved with the .gif extension. In order to publish the graph to web page, the following tag can be used: Missing includes publishing a graph or an image is to a web site is well known in the art (see Lemay's Teach yourself Web Publishing with HTML 3.0 in a week, Chapter 9, 2nd Edition, 1996, SAMS.net). The basic requirement is that the graph filename is to be saved with the .gif extension. In order to publish the graph to web page, the following tag can be used: Missing includes publishing a graph or an image.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the above HTML tag to publish graphs in Yaginuma to a web site so that the graph can be viewed on the WWW.

Claims 6 and 21

Yaginuma does not specifically disclose wherein the publishing step includes publishing a graph by transmitting the graph in connection with email. However, official notice is taken that it is well known in that art to attach a graph or image file to an e-mail message so that this graph or image file can be transmitted to an e-mail recipient. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use attach graph files in Yaginuma to an e-mail message so that the graph file can be sent to an e-mail recipient.

Conclusion

- 16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone

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number is (571) 272-3701. The Examiner can normally be reached on Tuesday-Friday, 6:00 to 16:15.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam can be reached at (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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October 26, 2004

ANTONY NGUYEN-BA PRIMARY EXAMINER

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